National Child Measurement Programme 2011-12
Hammersmith and Fulham, Kensington and Chelsea and Westminster

January 2013
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1. Key Findings

Headline figures and trends over time

The 2011-12 cohorts of Reception age and Year 6 children attending state schools in the tri-borough area have similar rates of obesity to London but higher rates than England. Exceptions include:

- Reception year in Kensington and Chelsea where rates are significantly lower than London.
- Year 6 in Hammersmith and Fulham where obesity rates are significantly higher than London’s.

<table>
<thead>
<tr>
<th></th>
<th>Reception Obesity</th>
<th>Year 6 Obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammersmith and Fulham</td>
<td>10.0%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Kensington and Chelsea</td>
<td>9.0%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Westminster</td>
<td>11.3%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Tri-borough</td>
<td>10.2%</td>
<td>24.5%</td>
</tr>
<tr>
<td>London</td>
<td>11.0%</td>
<td>22.5%</td>
</tr>
<tr>
<td>England</td>
<td>9.5%</td>
<td>19.2%</td>
</tr>
</tbody>
</table>

Reception and Year 6 obesity rates over the past six years show neither an increasing nor a decreasing trend.

Healthy weight children

Between Reception and Year 6 the proportion of healthy weight children falls from approximately 75% to 60%. Whilst about 60% of Year 6 children have a ‘healthy weight’ status many of them are at the heavier end of the healthy weight spectrum. i.e. less than a kilo away from being ‘overweight’ for their height and age. Based on this, it may be appropriate for future weight management programmes to consider a lower ‘at risk’ threshold for reception age children than just ‘overweight or obese’.

Gender

The highest levels of obesity in the three boroughs are found amongst Year 6 boys. Around a quarter are classified as obese, and just over half have a ‘healthy weight’ status.
Deprivation

The highest rates of child obesity continue to be found in children living in the most deprived areas of the three boroughs. For Year 6 pupils, obesity rates in the most deprived areas are almost double rates in the least deprived areas.

Ethnicity

Children from the Asian, other BME, and Black ethnic groups are the most likely to be obese. Those from White groups are least likely to be obese. This follows the pattern observed nationally.

Participation

Over 95% of eligible children participated in the child measurement programme across state maintained schools in the three boroughs. These participation rates surpass national targets. Resident children attending privately funded schools or schools outside of the three boroughs were not measured.
2. Background

The local monitoring of body mass index (BMI) in state primary school children was introduced in 2005/06, as a means of measuring local progress against the national Public Service Agreement (PSA) target, which was to halt the year on-year rise in obesity among children under 11 by 2010 in England. This national target has now been revised. Participation in the programme is expected to exceed 90% of all eligible children in each year group.

State primary school children in Reception Year and Year 6 are weighed and measured annually throughout the academic year; figures are submitted to the Department of Health at the end of the school year. Parents or guardians are sent letters prior to the data collection process and are given the option of ‘opting out’ their child. In 2010/11, parents or guardians of children in Kensington and Chelsea and Westminster schools also received letters detailing the height and weight status and BMI of their child.

This report analyses the results of data collection on Hammersmith & Fulham, Kensington & Chelsea, and Westminster’s Reception and Year 6 pupils during the 2010/11 school year. Where possible, it makes comparisons with national benchmarks as well as previous years’ findings.

Throughout the report results for the three boroughs are combined and referred to as ‘Tri-borough’, ‘Inner North West London’ or ‘INWL’. Borough level results can be found in the Appendices and in selected sections of the report.

A note on definition of child obesity

This report uses the epidemiological definitions of weight status that are used as standard in local and national analysis of obesity in a cohort of children. Under epidemiological definitions a child whose BMI lies above the 95th centile of the UK 90 BMI charts has a weight status of ‘obese’ and child with a BMI in between the 85th and 95th centiles has a status of ‘overweight’. The Public Health Outcomes Framework uses these definitions of weight status to measure health in Local Authorities.

When considering the weight status of an individual child clinicians frequently use ‘clinical’ definitions of weight status. Clinical cut-offs for ‘obesity’ are above the 97.7th centile of the UK 90 BMI charts. An overweight status is defined as between the 90.9th and 97.7th centiles. Feedback from the NCMP to parents on their child’s weight status uses these definitions of weight status.
3. The NCMP process in Hammersmith and Fulham, Kensington and Chelsea, and Westminster.

As part of the NCMP, Primary Care Trusts (PCTs) are required annually to measure the Body Mass Index (BMI) of Reception Year and Year 6 children attending state maintained schools in their area. Since 2009 the three local PCTs have contracted Central London Community Healthcare (CLCH) to collect child BMI data using their three school nursing services.

From April 2013, the responsibility for the local collection of NCMP data switches from PCTs to Local Authorities (LAs). For the 2013-14 school year the three LAs will contract CLCH to provide school nursing services in tri-borough state schools.
4. Results summary

Obesity rates in Reception aged children attending tri-borough state schools are higher than the national average; however there is no statistically significant difference in obesity rates. Children in reception at Kensington and Chelsea schools are an exception, where obesity levels are lower than the national average and significantly lower than the London.

Obesity rates amongst Year 6 children attending state schools in the three boroughs are significantly higher than the national average. Whilst 6 out of 10 Year 6 pupils were classified as having a ‘healthy weight’, there has been a consistent ‘drift’ towards the higher end of this category over time.

Table 1: 2011/12 NCMP Summary

<table>
<thead>
<tr>
<th>Reception age children</th>
<th>Underweight</th>
<th>Healthy Weight</th>
<th>Overweight</th>
<th>Obese</th>
<th>Obesity Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammersmith and Fulham</td>
<td>0.7%</td>
<td>74.6%</td>
<td>14.6%</td>
<td>10.0%</td>
<td>No significant difference with London and England</td>
</tr>
<tr>
<td>Kensington and Chelsea</td>
<td>0.6%</td>
<td>78.1%</td>
<td>12.3%</td>
<td>9.0%</td>
<td>Significantly lower than London</td>
</tr>
<tr>
<td>Westminster</td>
<td>1.2%</td>
<td>75.3%</td>
<td>12.2%</td>
<td>11.3%</td>
<td>Significantly higher than England</td>
</tr>
<tr>
<td>Tri-borough</td>
<td>0.9%</td>
<td>75.8%</td>
<td>13.1%</td>
<td>10.2%</td>
<td>No significant difference with London and England</td>
</tr>
<tr>
<td>London</td>
<td>1.4%</td>
<td>75.2%</td>
<td>12.4%</td>
<td>11.0%</td>
<td>-</td>
</tr>
<tr>
<td>England</td>
<td>0.9%</td>
<td>76.5%</td>
<td>13.1%</td>
<td>9.5%</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 6 children</th>
<th>Underweight</th>
<th>Healthy Weight</th>
<th>Overweight</th>
<th>Obese</th>
<th>Obesity Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammersmith and Fulham</td>
<td>1.2%</td>
<td>58.6%</td>
<td>14.4%</td>
<td>25.8%</td>
<td>Significantly higher than London and England</td>
</tr>
<tr>
<td>Kensington and Chelsea</td>
<td>0.7%</td>
<td>61.0%</td>
<td>15.9%</td>
<td>22.4%</td>
<td>Significantly higher than England</td>
</tr>
<tr>
<td>Westminster</td>
<td>1.0%</td>
<td>58.7%</td>
<td>15.5%</td>
<td>24.8%</td>
<td>Significantly higher than England</td>
</tr>
<tr>
<td>Tri-borough</td>
<td>1.0%</td>
<td>59.3%</td>
<td>15.2%</td>
<td>24.5%</td>
<td>Significantly higher than England</td>
</tr>
<tr>
<td>London</td>
<td>1.6%</td>
<td>60.9%</td>
<td>15.0%</td>
<td>22.5%</td>
<td>-</td>
</tr>
<tr>
<td>England</td>
<td>1.3%</td>
<td>64.9%</td>
<td>14.7%</td>
<td>19.2%</td>
<td>-</td>
</tr>
</tbody>
</table>
For Reception, Westminster had the 15th highest level of obesity of the 31 PCT areas in London (see chart 1), Hammersmith and Fulham had the 20th highest, and Kensington and Chelsea the 28th highest (4th lowest) obesity rates.

For Year 6, Hammersmith and Fulham had the 4th highest level of obesity of the 31 PCT areas in London (see chart 2). Westminster had the 9th the highest, and Kensington and Chelsea had the 18th highest (14th lowest) in London.
5. Overweight and Obese Children

The National Child Measurement Programme only measures children of Reception and Year 6 age who attend state maintained schools. This makes it difficult to accurately estimate how many children in the tri-borough area are overweight or obese. Combining NCMP data with Health Survey for England (HSE) prevalence data suggests:

- There could be between 18,000-20,000 obese or overweight children and young people aged 4-15 living in the tri-borough area.
- There could be between 12,000-14,000 obese or overweight pupils attending state maintained schools in the tri-borough area.

Note: these estimates are based on weighted sums of NCMP and HSE prevalence applied to the underlying populations. The number of children at risk of adult obesity is likely to be higher.
6. Obesity trends

In recent years child obesity rates in the tri-borough area appear to have been relatively stable. Obesity rates in Reception age cohorts have fluctuated between 9% and 12%. Amongst Year 6 cohorts the rates have mainly varied between 21% and 24%.
7. Gender

In the tri-borough area, 11.8% of Reception boys and 9.1% of Reception girls were classified as obese. For Year 6 children, the proportions were significantly higher, with boys much more likely to be obese as girls: 26.6% boys and 22.4% of girls were classified as obese.

Just over half of Year 6 boys in the tri-borough area had a 'healthy weight' status.

8. Socio-economic status

Table 2: Tri-borough pupils measured as part of the NCMP 2011-12

<table>
<thead>
<tr>
<th>Deprivation quintile</th>
<th>Reception pupils</th>
<th>Year 6 pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Measured</td>
<td>Obese</td>
</tr>
<tr>
<td>1 (20% most deprived in London)</td>
<td>1,520</td>
<td>179 (11.9%)</td>
</tr>
<tr>
<td>2</td>
<td>703</td>
<td>66 (9.4%)</td>
</tr>
<tr>
<td>3</td>
<td>430</td>
<td>50 (11.7%)</td>
</tr>
<tr>
<td>4</td>
<td>616</td>
<td>60 (9.9%)</td>
</tr>
<tr>
<td>5 (20% least deprived in London)</td>
<td>457</td>
<td>33 (7.2%)</td>
</tr>
</tbody>
</table>

Note: pupils whose recorded postcodes did not map to an LLSOA were omitted from this table.
There is a well established correlation between areas of deprivation and higher health need. Childhood obesity is no different: pupils living in more income deprived areas were almost twice as likely to be obese compared to those in the least income deprived group.

### Chart 6: Obesity by Income Deprivation Affecting Children (2011/12)

<table>
<thead>
<tr>
<th>Income Deprivation Affecting Children (London Quintiles)</th>
<th>Reception</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (20% most deprived)</td>
<td>11.9%</td>
</tr>
<tr>
<td>2</td>
<td>9.4%</td>
</tr>
<tr>
<td>3</td>
<td>11.7%</td>
</tr>
<tr>
<td>4</td>
<td>9.9%</td>
</tr>
<tr>
<td>5 (20% least deprived)</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income Deprivation Affecting Children (London Quintiles)</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (20% most deprived)</td>
<td>28.0%</td>
</tr>
<tr>
<td>2</td>
<td>24.2%</td>
</tr>
<tr>
<td>3</td>
<td>22.4%</td>
</tr>
<tr>
<td>4</td>
<td>23.6%</td>
</tr>
<tr>
<td>5 (20% least deprived)</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

### 9. Ethnicity three years data (2009/10 – 2011/12)

- The highest levels of obesity were found amongst the BME groups – just over one quarter of children in year 6 with Black, Asian or ‘Other BME’ ethnicities were obese. This broadly matches national findings where child obesity is most prevalent in ‘Black’ and ‘Other BME’ groups.

- ‘White British’ children had the lowest levels of obesity (18.8% for year 6 and 8.9% for reception), followed by those of ‘White Other’ ethnicity.

### Chart 7: Obesity by ethnic group in Tri-borough state schools (2009/10-2011/12)

- **Other BME**: Year 6 - 29.4%, Reception - 12.1%
- **Asian**: Year 6 - 25.9%, Reception - 10.3%
- **Black**: Year 6 - 25.9%, Reception - 13.3%
- **Mixed**: Year 6 - 25.8%, Reception - 9.7%
- **White Other**: Year 6 - 22.6%, Reception - 9.2%
- **White British**: Year 6 - 18.8%, Reception - 8.9%
Whilst there is a lower prevalence of obesity in ‘White’ children, they still form a large part of the tri-borough school population. Roughly 30% of all those measured since 2009/10 and found to be obese have either ‘White’ or ‘White Other’ ethnicity. A further 26% of all obese children were ‘Other BME’ and another 24% were ‘Black’.

Although Asians have a high prevalence of obesity locally, the small numbers of Asian pupils in the tri-borough area mean they form only 10% of the total obese population (see chart 8).

<table>
<thead>
<tr>
<th>Chart 8: Ethnic breakdown of all obese children in reception and year 6 (2009/10-2011/12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black 24%</td>
</tr>
<tr>
<td>Other BME 26%</td>
</tr>
<tr>
<td>White British 16%</td>
</tr>
<tr>
<td>White Other 14%</td>
</tr>
<tr>
<td>Mixed 10%</td>
</tr>
<tr>
<td>Asian 10%</td>
</tr>
</tbody>
</table>

10. Healthy weight children

Approximately 76% of Reception age children and 59% Year 6 children had a ‘healthy weight’ status. In comparison, 83% of the UK 1990 child population for both age groups had a ‘healthy weight’ status.

There were approximately 3,000 healthy weight children in Reception and 1,900 in Year 6 attending tri-borough schools. Many of these children are at the heavier end of ‘healthy weight’ and may be at risk of becoming overweight or obese in future years.

Adding 0.5kg to each Reception year child’s weight would move approximately 400 children from healthy weight to overweight. For Year 6, adding 1.5kg would shift roughly 320 children from healthy weight to overweight.
11. Participation rates

Just under 7,000 children were measured across the three boroughs as part of the 2011-12 programme. In each of the three boroughs the measurement target of 90% was surpassed for both Reception and Year 6 cohorts.

Table 3: NCMP participation rates by borough 2011-12

<table>
<thead>
<tr>
<th>Borough</th>
<th>Reception</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Children</td>
<td></td>
</tr>
<tr>
<td>Hammersmith and Fulham</td>
<td>1,386</td>
<td>1,420</td>
</tr>
<tr>
<td>Kensington and Chelsea</td>
<td>972</td>
<td>994</td>
</tr>
<tr>
<td>Westminster</td>
<td>1,393</td>
<td>1,495</td>
</tr>
<tr>
<td>Tri-borough</td>
<td>3,751</td>
<td>3,909</td>
</tr>
<tr>
<td>London</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>England</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

12. National data

The national data for 2011/12 can be found on the NHS Information Centre website on this link.

13. Appendix – Overweight and Obese maps

Map 1: Reception – Proportion of children attending a tri-borough state school who are Overweight or Obese (2007/08-2011/12)

Note: rates are for children resident in the tri-borough area attending a tri-borough state maintained school

Map 2: Year 6 – Proportion of children attending a tri-borough state school who are Overweight or Obese (2007/08-2011/12)

Note: rates are for children resident in the tri-borough area attending a tri-borough state maintained school